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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,931	03/08/2005	Richard Crumbach	266815US2PCT	7572
22850 7590 01/23/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ABOAGYE, MICHAEL	
			ART UNIT	PAPER NUMBER
			1725	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/526,931

Applicant(s)

CRUMBACH ET AL.

Examiner

Michael Aboagye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>03/08/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is not on a single paragraph. Delete also "[figure 2]" at the end of the abstract. Correction is required. See MPEP § 608.01(b).

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

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the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sauer (US Patent No. 5,299,726) in view of Reul (US Patent No. 6,461,188).

Regarding claim 11, Sauer teaches a transparent pane (column 3, lines 62-68) comprising: at least one electroconducting (see, copper strip "5" figure 1; abstract, column 1, line 64-column 2, line 2; column 3, lines 40-45), non-transparent contact surface placed on one of surfaces of the pane (opaque enamel, see column 2, lines 50-52), to connect it by soldering to a connection piece (column 3, lines 39-45).

Regarding claim 13, Sauer teaches solder filler metal or brazing alloy ("4", figure 1) spread over contact surfaces (column 3, lines 36-45).

Regarding claims 14 and 15, Sauer teaches said connection piece ("copper strips "5", figure 1) providing deposits of soldering filler metal that are present in a form of droplets (spot soldered) or of a thin layer to solder the connecting piece (column 3, lines 42-47).

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Regarding claim 16, Sauer teaches a multilayer system transparent to visible light applied between the glass sheets ("10 and 11", figure 2) and at least one electrically conducting layer ("13", figure 2) connected to the contact surface (column 3, lines 63-68).

Regarding claims 17 and 18, Sauer teaches using said multilayer system as a surface heater and as an antenna, which has an electrical contact (column 3, lines 1-9).

Regarding claims 19 and 20, Sauer teaches a system wherein at least the contact surface and the soldering location both being located on an inside of the composite glazing panel (column 1, lines 6-11; column 3, lines 20-22 and figure 2), and an opaque coating that covers the contact surface and optically masks the contact surface (column 2, lines 50-55).

Sauer does not expressly teach a cut out made in the soldering region.

However Reul teaches a solderable electrical connection comprising a metal insertion piece ("6", figure 3), an electrical connection element ("1", figure 3), a support sheet ("2", figure 3), a metal conductor ("3", figure 3) and connection faces ("5 & 11", figure 3) and forming a solder joint portion by a solder deposit ("9", figure 3, and abstract); wherein a cutout or a window is provides at the soldering portion to serve as an observation window for simple visual inspection of the soldering point (column 2, lines 8-12).

It would have been obvious to one of ordinary skill in the art at the time the applicants invention was made to have provided a cutout or a window at the solderable contact portion of the transparent pane system of Sauer as taught by Reul to serve as

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an observation window for simple visual inspection of the soldering point (Kunert et al., column 2, lines 8-12).

5. Claims 11-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kunert et al. (US Patent No. 4,721,845) in view of Reul (US Patent No. 6,461,188).

Regarding claim 11, Kunert et al. teaches a transparent pane comprising: at least one electroconducting non-transparent contact surface placed on one of surfaces of the pane to connect it by soldering to a connection piece (abstract column 3, lines 19-30).

Regarding claim 13, Kunert et al. teaches solder filler metal or brazing alloy spread over contact surfaces (column 3, lines 50-55).

Regarding claims 14 and 15, Kunert et al. teaches said connection piece, providing deposits of soldering filler metal that are present in a form of droplets (spot soldered) or of a thin layer to solder the connecting piece (column 3, lines 47-55).

Regarding claim 16, Kunert et al. teaches collecting conductor ("3", figure 1) over the viewing area to visible light applied between the glass sheets and at least one electrically conductor connected to the contact surface (column 3, lines 25-38).

Regarding claims 17 and 18, Kunert et al. teaches using said multilayer or conductor system used as a surface heater and as an antenna, which has an electrical contact (column 1, lines 55-68 and column 3, lines 25-38).

Regarding claims 19 and 20, Kunert et al. teaches a system wherein at least the contact surface and the soldering location both being located on an inside of the

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composite panel (figure 1), and an opaque coating that covers the contact surface and optically masks the contact surface (column 3, lines 22-27).

Kunert et al. does not expressly teach a cut out made in the soldering region.

However Reul teaches a solderable electrical connection comprising a metal insertion piece ("6", figure 3), an electrical connection element ("1", figure 3), a support sheet ("2", figure 3), a metal conductor ("3", figure 3) and connection faces ("5 & 11", figure 3) and forming a solder joint portion by a solder deposit ("9", figure 3, and abstract); wherein a cutout or a window is provides at the soldering portion to serve as an observation window for simple visual inspection of the soldering point (column 2, lines 8-12).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided a cutout or a window at the solderable contact portion of the transparent pane system of Kunert et al. as taught by Reul to serve as an observation window for simple visual inspection of the soldering point (Kunert et al., column 2, lines 8-12).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dietrich et al. (US 5,011,745), Schacklette et al. (US 5,099,621), Braun et al. (US 5,534,978), Karla (US 4,618,088) and Saito et al. (US 6,735,857) are cited in PTO-892.


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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Aboagye whose telephone number is 571-272-8165. The examiner can normally be reached on Mon - Fri 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JONATHAN JOHNSON
PRIMARY EXAMINER


Michael Aboagye
Assistant Examiner
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01/18/2007